DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013073 Address: 333 Burma Road **Date Inspected:** 03-Apr-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Mr.Li Jia /Zhu Tian Shu **CWI Present:** Yes No **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

This QA Inspector observed the following work in progress:

BAY-1 -Traveler Rail (TR)

Flux Cored Arc Welding (FCAW) welding of weld joint 20TR2-025-013. Welder is identified as 250672. ZPMC Quality Control (QC) is identified as Mr. Tian Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-F.

FCAW welding of weld joint 20TR1-035-001. Welder is identified as 215397. ZPMC Quality Control (QC) is identified as Mr. Tian Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-F.

FCAW welding of weld joint 20TR2-050-013. Welder is identified as 059450. ZPMC Quality Control (QC) is identified as Mr. Tian Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-F.

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FCAW welding of weld joint 20TR2-042-013. Welder is identified as 216872. ZPMC Quality Control (QC) is identified as Mr. Tian Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-F.

FCAW welding of weld joint 20TR2-024-011. Welder is identified as 216575. ZPMC Quality Control (QC) is identified as Mr. Tian Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-F.

BAY-5-TR

This QA Inspector observed ZPMC MT Technicians performing Magnetic Particle Testing (MT) for the TR Buttering performed area.

The attached photographs provide additional detail.

BAY-2-FLOORBEAM (FB)

Submerged Arc Welding (SAW) welding of weld joint FB3220-001-001. Welder is identified as 045270. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-L2c-S-2.

SAW welding of weld joint FB3184-001-002. Welder is identified as 250050. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-L2c-S-2.

FCAW welding of weld joint FB3185-001-006. Welder is identified as 045209. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-B-U2a-F-1.

FCAW welding of weld joint FB3188-001-009. Welder is identified as 045209. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-B-U2a-F-1.

BAY-7-TR

This QA Inspector observed ZPMC welding personnel performing Buttering by FCAW process for 10TR2-004, 11TR3-018&10TR3-004. Welder are identified as 051246, 062447&048625 respectively. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e. WPS-345-FCAW-1G (1F)-Repair-1. The Buttering welding was been performed against the B-CWR1100 Rev No: 0 and ZPMC Quality Control (QC) is identified as Mr.Xia Yong Zheng and Certified Welding Inspector (CWI) is identified as Mr. Li Jia.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer